

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,258	9/918,258 07/30/2001		Steve Packwood	06005/36578	2238
4743	7590	06/03/2004		EXAM	INER
	•	STEIN & BORUN	LEFKOWITZ, SUMATI		
6300 SEARS 233 S. WAC			ART UNIT	PAPER NUMBER	
CHICAGO,	IL 6060	6	2112	5	
				DATE MAILED: 06/03/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		09/918,258	PACKWOOD ET AL.				
Office Action	Summary	Examiner	Art Unit				
		Sumati Lefkowitz	2112				
	of this communication app	ears on the cover sheet with th	e correspondence addres	s			
THE MAILING DATE OF T - Extensions of time may be available after SIX (6) MONTHS from the may lift the period for reply specified about 1 NO period for reply is specified at Failure to reply within the set or extension and the period by the Office lat the earned patent term adjustment. See	HIS COMMUNICATION. e under the provisions of 37 CFR 1.13 iling date of this communication. ve is less than thirty (30) days, a reply oove, the maximum statutory period w ended period for reply will, by statute, er than three months after the mailing	'IS SET TO EXPIRE 3 MONT 36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS from cause the application to become ABANDO date of this communication, even if timely in the communication, even if timely in the communication of the communication.	e timely filed days will be considered timely. om the mailing date of this commut NED (35 U.S.C. § 133).	nication.			
Status							
1) Responsive to comm	· · ·						
2a) ☐ This action is FINAL	· /—	action is non-final.					
		nce except for formal matters,		rits is			
ciosed in accordance	e with the practice under E	x parte Quayle, 1935 C.D. 11,	453 O.G. 213.				
Disposition of Claims							
4) Claim(s) <u>1-25</u> is/are	•						
	m(s) is/are withdray	vn from consideration.					
/—	Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,8-13,20-2</u> 7)⊠ Claim(s) <u>2-7,14-19 a</u>							
8) Claim(s) are s	·	relection requirement.					
	,						
Application Papers							
9)⊠ The specification is o	•						
		☑ accepted or b)☐ objected t					
		drawing(s) be held in abeyance. So ion is required if the drawing(s) is	` *	121(4)			
		aminer. Note the attached Offi					
Priority under 35 U.S.C. § 11	9						
12) Acknowledgment is n a) All b) Some * 1. Certified copie 2. Certified copie 3. Copies of the application fro	nade of a claim for foreign c) None of: es of the priority documents certified copies of the prior m the International Bureau	s have been received in Applic ity documents have been rece	ation No ived in this National Stag	је			
Attachment(s)							
1) Notice of References Cited (PT		4) Interview Summa					
 Notice of Draftsperson's Patent Information Disclosure Stateme Paper No(s)/Mail Date 4. 		Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date. 5 . al Patent Application (PTO-152)			
S. Patent and Trademark Office							

Application/Control Number: 09/918,258

Art Unit: 2112

DETAILED ACTION

1. Claims 1-25 are pending.

Specification

- 2. The disclosure is objected to because of the following informalities:
 - the "Brief Description of the Drawings" makes reference to Figure 5 only, not both
 Figures 5A and 5B
 - [0045] makes reference to Figure 5 only, not both Figures 5A and 5B
 Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 8-13, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Warrior, 5,764,891.
- a. As to claims 1 and 13, Warrior discloses a field device (note abstract, Figures 1 and 2) for use in a process control system having a digital data bus (note Figure 2, loops 70 and 18), comprising a first communications interface (note Figure 2, FB Interface 30 and 36) communicatively coupled to the digital data bus that is adapted to process communications

Application/Control Number: 09/918,258

Art Unit: 2112

having a first protocol (i.e., Field bus), a second communications interface (note Figure 2, Transmitter Interface 34 and 35) communicatively coupled to the digital data bus that is adapted to process communications having a second protocol (i.e., HART) different from the first protocol, a memory (note Figure 2, memory 48), and a processor (note Figure 2, processors 38 and 66) communicatively coupled to the memory, the first communications interface and the second communications interface, wherein the processor is programmed to process the communications having the first protocol and the communications having the second protocol (note column 3, line 35 – column 5, line 46).

- b. As to claims 8 and 20, Warrior discloses that the first protocol is a HART communication protocol and wherein the second protocol is a Fieldbus communication protocol.
- c. As to claims 9, Warrior discloses that the first communications interface includes a modem (note Figure 2, modem 68).
- d. As to claim 10, Warrior discloses that the first communications interface further includes an amplitude adjustment circuit (note Figure 2, power conversion 72 and column 4, lines 11-17) coupled to an output of the modem.
- e. As to claim 11, Warrior discloses that the second communications interface includes a media access unit (note Figure 2, elements 30, 60, 62, 64) and a protocol conversion unit (note Figure 2, element 66) coupled to the media access unit.
- f. As to claim 12, Warrior discloses that the memory contains a first software routine for processing the communications having the first communication protocol and a second software routine for processing the communications having the second communication protocol (note column 3, lines 49-51, wherein it is inherent that the memory contains instructions for

Art Unit: 2112

processing both HART and Field bus signals, since the device interfaces with both types of signals).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 6. Claims 21-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warrior, 5,764,891 in view of Applicant's Admitted Prior Art (hereinafter AAPA).
- a. As to claim 21, Warrior discloses receiving communications having the second protocol different from the first protocol in the field device via the digital data bus, but fails to disclose using a portable configuration tool proximate to the field device to send the communications having the second protocol.

-9

Application/Control Number: 09/918,258

Art Unit: 2112

AAPA discloses the step of using a portable configuration tool proximate to the field device to send the communications having the second protocol (note [0005]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a portable configuration tool proximate to the field device to send the communications having the second protocol, as AAPA teaches, in the system of Warrior so as to locally configure the field device, as AAPA teaches in [0005].

- b. As to claim 22, AAPA discloses that using the portable configuration tool proximate to the field device to the send the communications having the second protocol includes the step of using a HART communicator (note [0005]).
- c. As to claim 23, Warrior discloses a field device having a first communications interface (note Figure 2, elements 30 and 36) for processing communications having a first protocol (i.e., Fieldbus protocol) and a second communications interface (note Figure 2, elements 34 and 36) for processing communications having a second protocol (i.e., HART protocol).

Warrior fails to disclose a method of locally configuring the field device, the method comprising the steps of communicatively coupling the portable configuration tool to the field device; and sending configuration information from the portable configuration tool to the field device using the second communication protocol.

AAPA discloses a method of locally configuring the field device, the method comprising the steps of communicatively coupling the portable configuration tool to the field device, and sending configuration information from the portable configuration tool to the field device using the second communication protocol (i.e., HART protocol) (note [0005]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a portable configuration tool proximate to the field device to send the communications having the second protocol, as AAPA teaches, in the system of Warrior so as to locally configure the field device, as AAPA teaches in [0005].

d. As to claim 25, AAPA discloses that the step of sending configuration information from the portable configuration tool to the field device using the second communication protocol includes the step of using a HART communication protocol to send the configuration information (note [0005]).

Allowable Subject Matter

7. Claims 2-7, 14-19, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, as the prior art teaches or suggests field devices operating in accordance with various protocols.

US PG-PUBS: 2004/0073402 A1 DelaCruz et al.

2002/0167904 A1 Borgeson et al.

US Patents:

6,629,059 Borgeson et al.

6,449,715 Krivoshein

6,266,726 Nixon et al.

5,923,557 Eidson

Art Unit: 2112

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Lefkowitz whose telephone number is 703-308-7790. The examiner can normally be reached on Monday-Friday from 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached at 703-305-4815.

The fax phone numbers for the organization where this application or proceeding is assigned are:

703-746-7238	for After-Final communications
703-872-9306	for Official communications
703-746-5661	for Non-Official/Draft communications

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Sumati Lefkowitz Primary Examiner Art Unit 2112

sl May 28, 2004